



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON DC

24 MAR 1999

MEMORANDUM FOR ALMAJCOM/CV

FROM: HQ USAF/IL  
1030 Air Force Pentagon  
Washington DC 20330-1030

SUBJECT: Carbon Monoxide Detectors

It is imperative we maintain a safe environment for our military families. Two recent incidents of carbon monoxide (CO) poisoning in our base housing and four fatalities in a home maintained by another Service highlight the need for us to closely review this hazard. The latest statistics published by the US Consumer Product Safety Commission (CPSC) show that each year in the US there are up to 15,400 CO poisonings, with over 200 deaths. The CPSC data and our review of the CO hazard with respect to military family housing compel us to establish new policy on CO detector installation.

Please take immediate steps to plan for and install CO detectors in your Air Force owned and leased housing units with fossil fuel burning systems. The attached Carbon Monoxide Detector Policy paper gives specific implementation guidance.

We recognize that this policy has resource implications and that many bases have already installed the detectors in family housing. MAJCOMs should survey their bases and provide your plan plus any potential resource limitations to AF/ILEH by 3 May 99. Our HQ USAF/ILEH point of contact is Mr. Roberto Castellanos, DSN 664-4643.

A handwritten signature in black ink, reading "John W. Handy", is positioned above the typed name.

JOHN W. HANDY  
Lieutenant General, USAF  
DCS/Installations & Logistics

Attachment:  
AF CO Detector Policy

cc:  
AF/CV

## AIR FORCE CARBON MONOXIDE (CO) DETECTOR POLICY

Effective immediately, each MAJCOM will take timely, cost effective measures to install CO detectors in all Air Force owned and leased housing units, with natural gas, oil or LPG fired systems such as furnaces, gas water heaters, ranges, clothes dryers, or fireplaces. We recommend one CO detector per housing unit near the sleeping areas; units with multiple floors should install one CO detector per floor.

Our long range policy is to provide hard-wired CO detectors during new construction and major renovation projects. Permanent hard-wired CO detectors with battery back-up and a detection element service life not less than 10 years shall be used. Until then, we recommend installation of the direct plug-in type with battery back-up and a minimum five-year warranty. Detectors shall be listed by Underwriters Laboratory to the UL Standard 2034, Single and Multiple Station Carbon Monoxide Detectors, October 1998 Edition. Detectors manufactured and listed in 1992 and 1996 edition have significant false alarm problems and, more importantly, may not alarm at all under low humidity condition as experienced during the winter heating season.

When installing or issuing detectors, recommend you direct occupants' attention to the manufacturer's instructions regarding operation, installation recommendations, and proper maintenance of the detectors. It would also be a good time to provide a brief CO awareness briefing explaining the symptoms of CO poisoning and what to do when the detector sets an alarm. We cannot forget that 60 percent of our military families live in the local community. A CO poisoning awareness briefing should be provided to the entire base population at the earliest opportunity. The briefing should also be part of the newcomers orientation program.

**Be aware that proper routine maintenance of fossil-fuel burning systems is still the most effective method of preventing CO poisoning.** The presence of CO detectors does not insure the absence of CO. CO detectors are not an alternative for a well managed routine maintenance program of fuel burning appliances nor are they interim measures to the immediate repair or replacement of defective appliances. Facilities with natural gas, oil, or liquid propane gas fired furnaces, water heaters, ranges, or clothes dryers should have routine maintenance checks performed annually, typically at the beginning of the heating season. Installations shall ensure routine appliance inspections are accomplished in accordance with National Fire Protection Association Standard 54, *National Fuel Gas Code*, Appendix H, Recommended Procedure for Safety Inspection. Fireplaces should also be checked to ensure safe operation.

The Air Force Civil Engineer Support Agency stands ready to provide any technical assistance necessary to enable the timely implementation of this policy. In this manner, we can quickly implement a CO policy that provides another level of protection for our families, while minimizing the impact on resources. HQ USAF/ILEH point of contact is Mr. Roberto Castellanos, DSN 664-4643. HQ AFCESA technical points of contact are Mr. Fred Walker or Mr. Gerald Doddington, DSN 523-6315/6343, respectively.